# A wound dressing shows its value: clinical and economic effects of a dressing regime change for primary and home care chronic wound management

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**STUDY AIM**

To investigate potential benefits of a **change in dressing regime** for chronic wound management in primary and home care settings.

## Background

- Budgetary and staffing constraints often mandate an approach of doing more with less, without sacrificing patient outcomes.
- As part of an initiative to optimise dressing usage in **primary care** facilities in Seville (Spain), a literature review identified a **multilayered, bordered, silicone-coated foam dressing (SFD*)** as best fulfilling published requirements for bordered foam dressings (fluid absorption / retention / evaporation, conformability / compatibility, stiffness / strength, adhesiveness, permeability to pathogens).[1]

**Multilayered structure of bordered, silicone-coated foam dressing (SFD)**


## Methods

**Inclusion criteria**

- Adult with wound appropriate for management with SFD
- Wound not reduced in size by >40% to 50% in previous month
- Wound managed with foam dressing (other than SFD) for minimum of 4 weeks, prior to baseline visit.

**Exclusion criteria**

- Contraindication/sensitisation to SFD components
- Pressure injury stage 1, deep tissue injury or terminal wound.

**Schedule**

- Structured **educational support programme** for study clinicians
- Bordered foam dressings (BFD) **switched to SFD** for ≥4 weeks (while maintaining the same standard of care),
- **Historical data** collated on **BFD usage in the 7 days preceding the baseline visit**.
- **SFD usage in the 7 days preceding the final visit** was evaluated.

***Key outcome measures:***

- ✓ Number of dressing changes
- ✓ Wound progress (improved, no change, deteriorated), size/condition, peri-wound condition.
- ✓ Performance ratings of dressings (clinician and patient).
- ✓ Pain before and during dressing change (on a scale from 0 = no pain to 10 = worst pain imaginable); adverse events.

## Results

### Baseline patient and wound characteristics:

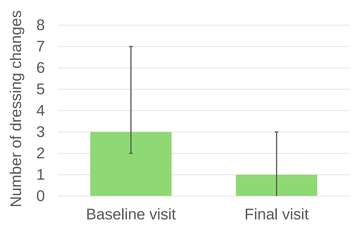
→37 patients (female 54.1%, male 45.9%)

→Age range: 30 to 90+ years (82.1% 70-89 years).

→Category 2 pressure injury (24.3%) and venous leg ulcer (18.9%) most common wound types.

→Wound area ($cm^2$; median [minimum- maximum]): 6.3 [0.20-65.97]

| | Wound characteristic (n=37) | % |
|---|---|---|
| Duration: | Unknown, but > 4 weeks | 2.7 |
| | 1 – 3 months | 54.1 |
| | >3 – 6 months | 24.3 |
| | >6 – 12 months | 8.1 |
| | > 1 year | 10.8 |
| Depth: | Superficial | 59.5 |
| | Deep | 40.5 |
| Exudate amount: | Low | 24.3 |
| | Moderate | 62.2 |
| | High | 13.5 |



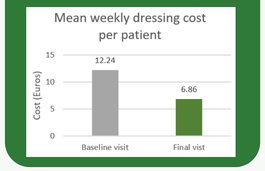

***PRIMARY OUTCOME***

**The median number of dressing changes in the 7 days before the baseline visit was 3, while at the final visit (after dressing switch), it was 1.**

Data presented as median (maximum; minimum) values. *Differences between baseline and final visit are statistically significant: Wilcoxon signed rank test 0.0000; sign test: 0.0000

**Weekly dressing cost**

- 5.38 Euros less than baseline (44% cost reduction)



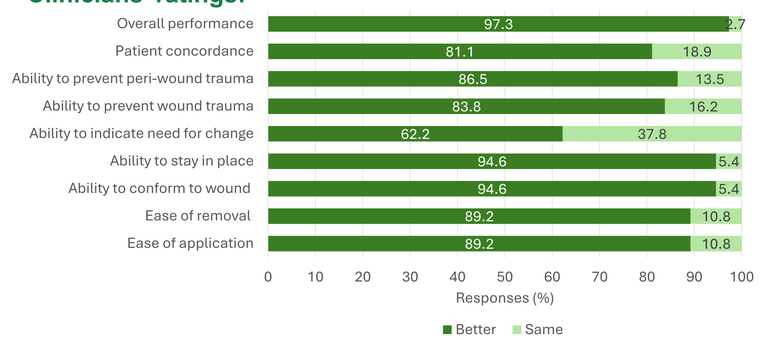

**Wound healing**

- 50% reduction in wound area in 4 weeks in 75% of patients
- 68.7% reduction from baseline to final visit
- 32% wounds healed by final visit

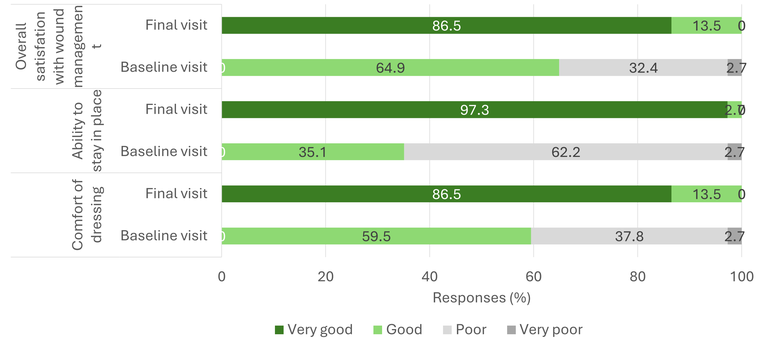
**Pain severity scores**

- Reduction in pain severity before and during dressing change from 3.1 and 3.3 at baseline to 1.1 and 0.5 at final visit

### Clinicians' ratings:




### Patients' ratings:




**Safety Data:**

No dressing-related adverse events observed.

## Conclusions

- Introduction of a high-quality bordered foam dressing, supported by an educational programme for clinical staff, resulted in a **prolonged interval between dressing changes** and an overall **reduction in dressing-related costs.**
- Clinical performance data suggest that this approach can also **positively impact wound outcomes.**

These findings highlight the potential benefit of dressing regime improvements in delivering **value-based wound care**.

**Reference:** 1. Raepsaet C et al. Clinical research on the use of bordered foam dressings in the treatment of complex wounds: a systematic review of reported outcomes and applied measurement instruments. *J Tissue Viability.* 2022;31(3):514-522.

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